Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the <u>FY 2002 Advertised Budget Plan</u>, as approved by the Board of Supervisors on April 30, 2001:

The Board of Supervisors made no changes to the FY 2002 Advertised Budget Plan.

The following funding adjustments reflect all approved changes to the FY 2001 Revised Budget Plan from January 1, 2001 through April 23, 2001. Included are all adjustments made as part of the FY 2001 Third Quarter Review:

The Board of Supervisors made no adjustments to this fund.

County Executive Proposed FY 2002 Advertised Budget Plan

Purpose

Fund 402, Sewer Construction Improvements, provides for the wastewater management construction projects and is funded by system revenues (e.g., Sewer Service Charges, Availability Fees, and Connection Fees) through a transfer of funds from Fund 400, Sewer Revenue. All projects in Fund 402 are supported by sewer system revenues and are included in the Summary of Capital Projects.

FY 2002 Initiatives

In FY 2002, an amount of \$53,902,809 is included in Fund 402, Sewer Construction Improvements to provide continued funding for seven projects.

Funding of \$4,927,809 is included for the payment to the District of Columbia Water and Sewer Authority (DCWASA) for the County's share of the project costs associated with the upgrade of the DC Blue Plains Wastewater Treatment Plant based on the construction schedule and DCWASA 's projected expense summary.

Funding of \$2,900,000 for the Pump Station Renovations includes \$2,000,000 for the implementation of a Supervisory Control and Data Acquisition (SCADA) system for most sewage pumping stations in the County to remotely operate, monitor and control the pumping stations; \$500,000 will provide for the replacement of 160 sewage grinder pumps in the Lincoln-Lewis-Vannoy area and at several other locations throughout the County due to the failure rate and maintenance costs of these twenty-five year old pumps; \$300,000 for the rehabilitation of the Clifton pump and haul facility due to the increased maintenance cost of this thirty-year old facility, and \$100,000 for the construction of a flow diversion chamber along the Colvin Run trunk sewer at Difficult Run Pumping Station which will allow the pump station to be taken off-line without the influent sewer becoming clogged with grit and debris.

Funding of \$29,625,000 for Alexandria Sanitation Authority (ASA) Plant Improvements represents the County's share of construction costs to upgrade the ASA treatment plant and is based on ASA 's projected expense summary.

An amount of \$50,000 for Integrated Sewer Metering will provide for the upgrade of existing sewer meters throughout the county.

Funding of \$5,300,000 for the Sewer Replacement and Transmission Program will provide for repair, replacement, and renovation of aging sewer lines using predominantly "no dig" technologies, (i.e. fold and form, sliplining and institutorm processes). This program is based on an aggressive measure to avoid expensive and reactionary maintenance costs such as sewer spills and sewer line breaks.

An amount of \$3,600,000 for Sewer Line Enlargement will complete the upgrade of 5,150 linear feet of the Pohick Sewer 60-inch Trunk line that is currently approaching capacity. Funding of \$3,100,000 was approved in FY 2001 for the initial design and preliminary study of the trunk line. The cost estimates are high for this project based on the depth of the trunk line that is over 26 feet deep.

Funding in the amount of \$7,500,000 for Replacement and Renewal - Treatment includes \$5,500,000 for the replacement of the filter presses at the Noman M. Cole Jr., Pollution Control Plant. The existing membrane filter press sludge dewatering facility was placed in operation in July 1991. Recently, the plant has experienced several maintenance and repair problems with the existing sludge dewatering facility. This has heightened the urgency for addressing these problems and concerns in a prompt manner. It should be noted that \$544,000 was added during the FY 2000 Carryover to support the design phase. In addition, funding of \$2,000,000 is needed for the replacement of 8 monomedia filter bottoms that have been in service for 23 years, and the bottoms have corroded and are beyond economical repair.

The agency will continue to hold a nitrification reserve in the amount of \$1,667,000 in Fund 400, Sewer Revenue, to provide funding for the County share of the design and construction expenses associated with the installation of a Biological Nutrient Removal (BNR) system at the Arlington Wastewater Treatment Plant. The retention of a nitrification reserve will provide the County with the ability to respond to State Water Control Board (SWCB) mandates for stricter phosphorus and nitrogen effluent permit standards.

Funding Adjustments

The following funding adjustments reflect all approved changes to the FY 2001 Revised Budget Plan since passage of the <u>FY 2001 Adopted Budget Plan</u>. Included are all adjustments made as part of the FY 2000 Carryover Review and all other approved changes through December 31, 2000:

♦ As part of the FY 2000 Carryover Review, the Board of Supervisors approved an increase of \$106,195,096 including \$68,651,096 for the carryover of unexpended project balances, \$37,000,000 for the County's share of the construction costs for the treatment expansion of Alexandria Sanitation Authority based on their projected cash flow statements and \$544,000 to support the design phase of the replacement sludge dewatering system at the Noman M. Cole, Jr., Pollution Control Plant.

A Fund Statement, a Summary of Capital Projects and Project Detail Tables for each project funded in FY 2002 are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., a contingency or planning project). The Project Detail Tables include project location, description, source of funding, and completion schedules.

FUND STATEMENT

Fund Type G40, Enterprise Funds

Fund 402, Sewer Construction Improvements

	FY 2000 Actual	FY 2001 Adopted	FY 2001 Revised	FY 2002 Advertised	FY 2002 Adopted Budget Plan
	Actual	Budget Plan	Budget Plan	Budget Plan	Budget Flair
Beginning Balance	\$58,836,364	\$0	\$68,655,788	\$0	\$0
Revenue:					
Revenue from the					
Commonwealth ¹	\$4,692	\$0	\$0	\$0	\$0
Total Revenue	\$4,692	\$0	\$0	\$0	\$0
Transfer In:					
Sewer Revenue (400)	\$58,775,000	\$17,578,184	\$55,117,492	\$53,902,809	\$53,902,809
Total Transfer In	\$58,775,000	\$17,578,184	\$55,117,492	\$53,902,809	\$53,902,809
Total Available	\$117,616,056	\$17,578,184	\$123,773,280	\$53,902,809	\$53,902,809
Total Expenditures	\$48,960,268	\$17,578,184	\$123,773,280	\$53,902,809	\$53,902,809
Total Disbursements	\$48,960,268	\$17,578,184	\$123,773,280	\$53,902,809	\$53,902,809
Ending Balance	\$68,655,788	\$0	\$0	\$0	\$0

¹ An amount of \$4,692 represents unanticipated revenues from the Virginia Department of Transportation for the reimbursement of sewer line expenses.

FY 2002 Summary of Capital Projects

Fund: 402 Sewer Construction Improvements

		Total	FY 2000	FY 2001	FY 2002	FY 2002
		Project	Actual	Revised	Advertised	Adopted
Project #	Description	Estimate	Expenditures	Budget	Budget Plan	Budget Plan
G00901	DC Treatment Center - Blue Plains	\$61,891,342	\$678,063.00	\$5,355,599.58	\$4,927,809	\$4,927,809
G00903	Arlington Wastewater Treatment	10,457,392	1,304,085.00	1,797,844.00	0	0
100351	Pump Station Renovations		398,045.68	4,380,114.97	2,900,000	2,900,000
100355	Pump And Haul - Wylie/Gunston	2,900,000	1,345,199.39	608,755.81	0	0
100904	ASA Wastewater Treatment Plant	178,466,723	33,598,143.44	56,883,836.21	29,625,000	29,625,000
100905	Bell Haven Replacement	1,491,742	85,456.76	1,262,506.98	0	0
L00117	Dogue Creek Rehab/Replacement	1,711,456	1,264.36	203,677.74	0	0
N00321	Lower Potomac Exp 54 MGD	105,269,000	3,098,857.71	24,609,618.36	0	0
T00124	Rocky Run Pump Station	2,535,926	123,045.87	2,412,880.13	0	0
X00445	Integrated Sewer Metering		25,612.90	146,906.20	50,000	50,000
X00823	Extension Projects FY1993	3,779,003	23,261.44	1,404,193.79	0	0
X00824	Extension Projects FY1994	1,258,000	91,251.99	257,489.49	0	0
X00825	Extension Projects FY1995	3,049,001	116,764.33	383,904.52	0	0
X00826	Extension Project FY1996	6,537,349	246,151.09	3,667,069.24	0	0
X00900	Replacement Transmission		0.00	759,576.00	0	0
X00905	Replacemt & Transmission		5,637,917.87	10,002,255.98	5,300,000	5,300,000
X00906	Sewer Line Enlargement		19,572.85	3,179,873.56	3,600,000	3,600,000
X00908	Sewer Line Replacement - 5 Inch		0.00	136,920.04	0	0
X00910	Replacement and Renewal		89,600.00	3,448,323.00	7,500,000	7,500,000
X00930	Sewer Relocation - VADOT		18,949.07	327,169.76	0	0
X00935	Rt. 50/66 Sewer Agreement Reserve	1,000,000	0.00	1,000,000.00	0	0
X00940	Developer Projects County Costs		169.55	162,956.59	0	0
X00942	Accotink PS Rehabilitation	2,838,883	2,058,855.52	743,550.12	0	0
X00998	Sewer Contingency Project	0	0.00	585,685.83	0	0
X00999	Sewer Revolving Fund		0.00	52,572.00	0	0
Total		\$383,185,817	\$48,960,267.82	\$123,773,279.90	\$53,902,809	\$53,902,809

G00901	DC Treatment Blue Plains	
Countywide		Countywide

This project is for the payment to the District of Columbia Water and Sewer Authority (DCWASA) for Fairfax County's share of the projected costs associated with the upgrade to DC Blue Plains Wastewater Treatment Plant. The County pays for approximately 8.4 percent of the total costs for the design and construction of the upgrade for nitrification and sludge handling facilities. Fairfax County's estimated share of the project cost is \$61,891,342 over a six-year period. Funding of \$4,927,809 provides for the County's FY 2002 share based on DCWASA's projected expense summary and construction schedule.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering	0	0	0	0	0	0	0
Construction	5,355,600	0	0	5,355,600	0	0	0
Interjurisdictional							
Payment	56,535,742	20,875,517	678,063	0	4,927,809	4,927,809	30,054,353
Total	\$61,891,342	\$20,875,517	\$678,063	\$5,355,600	\$4,927,809	\$4,927,809	\$30,054,353

Source of Funding						
General	General Obligation	Transfers from	Sewer	Total		
Fund	und Bonds Other Funds		Revenue	Funding		
\$0	\$0	\$0	\$4,927,809	\$4,927,809		

Completion Schedule							
Land Acquisition Completion	Engineer/Architect Contract Award	Design Completion	Construction Contract Award	Construction Completion			
First Quarter FY 2000	Fourth Quarter FY 2000	Fourth Quarter FY 2000	Various	Fourth Quarter FY 2005			

100351	Pump Station Renovations	
Countywide		Countywide

This project provides for the renovation of the existing pumping stations within the Wastewater Management Program. FY 2002 funding in the amount of \$2,900,000 includes \$500,000 for the replacement of 160 sewage grinder pumps primarily in the Lincoln-Lewis-Vannoy area; \$300,000 for the rehabilitation of the Clifton pump and haul system; and \$100,000 for the construction of a flow diversion chamber along the Colvin Run trunk sewer line at the Difficult Run pump station. In addition, \$2,000,000 provides for the construction of the Supervisory Control and Data Acquisition (SCADA) system to remotely operate, monitor and control the 62 pumping stations throughout the County from one location.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition		\$5,556	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering		1,844,806	210,218	415,100	0	0	0
Construction		4,300,076	156,833	3,865,015	2,900,000	2,900,000	0
Other		117,790	30,995	100,000	0	0	0
Total	Continuing	\$6,268,227	\$398,046	\$4,380,115	\$2,900,000	\$2,900,000	\$0

Source of Funding						
General	General Obligation	Transfers from	Sewer	Total		
Fund	Bonds Other Funds		Revenue	Funding		
\$0	\$0	\$0	\$2,900,000	\$2,900,000		

100904	ASA Plant Improvements					
ASA Sewer Sh	ASA Sewer Shed					

This project funds the payment to the Alexandria Sanitation Authority for Fairfax County's share of the construction costs associated with the improvements to the Alexandria Wastewater Treatment Plant. The County pays for approximately sixty percent of the total costs of the upgrade for ammonia removal. Funding of \$29,625,000 provides for the County's FY 2002 share based on the projected expense summary. The project has completed the design phase and construction is scheduled for completion in FY 2003. It is anticipated that a loan application for Virginia Resource Authority (VRA) funding will be approved in the Spring of 2001 to support the County's future payments.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering	0	0	0	0	0	0	0
Construction	87,059,723	550,887	0	56,883,836	29,625,000	29,625,000	0
Other	91,407,000	22,554,032	33,598,143	0	0	0	35,254,825
Total	\$178,466,723	\$23,104,919	\$33,598,143	\$56,883,836	\$29,625,000	\$29,625,000	\$35,254,825

Source of Funding						
General	General Obligation	Transfers from	Sewer	Total		
Fund	Bonds Other Funds		Revenue	Funding		
\$0	\$0	\$0	\$29,625,000	\$29,625,000		

Completion Schedule							
Land Acquisition Completion	Engineer/Architect	Design	Construction	Construction			
	Contract Award	Completion	Contract Award	Completion			
N/A	First Quarter	First Quarter	First Quarter	Fourth Quarter			
	FY 2000	FY 2000	FY 2001	FY 2003			

X00445	Integrated Sewer Metering	
Countywide		Countywide

This project funds the Wastewater Management's metering program. Flows must be monitored to: 1) determine when the lines are nearing maximum capacity, 2) detect groundwater inflow/infiltration, 3) allow proper billing under interjurisdictional agreements for sewage treatment, and 4) comply with the Virginia Water Control Board regulations requiring metering at all trunk sewer junctions. FY 2002 funding of \$50,000 will provide for the upgrade of existing meters based on the agency's replacement metering schedules.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land			-				
Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering		36,830	0	0	0	0	0
Construction		63,464	0	96,906	0	0	0
Other		1,491,636	25,613	50,000	50,000	50,000	0
Total	Continuing	\$1,591,930	\$25,613	\$146,906	\$50,000	\$50,000	\$0

Source of Funding							
General	General Obligation	Transfers from	Sewer	Total			
Fund	Fund Bonds		Revenue	Funding			
\$0	\$0	\$0	\$50,000	\$50,000			

X00905	Sewer Replacement and Transmission Pro	ogram
Countywide		Countywide

This is a continuing project established to implement systematic rehabilitation of the County's more than 3,000 miles of sanitary sewer lines. Rehabilitation options include techniques/products such as slip-lining, instituform, and fold and form. This work is performed by outside contractors. This project completed 20.8 miles of sewer lines in FY 1999, 20 miles of sewer lines in FY 2000, and anticipates 20 miles in FY 2001. Funding in the amount of \$5,300,000 is included for the recurring repair, replacement and renovation of approximately 20 miles of sewer lines using predominantly "no dig" technologies in FY 2002.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition		\$121,217	\$1,026	\$1,000	\$0	\$0	\$0
Design and							
Engineering		1,355,864	117,729	621,700	0	0	0
Construction		38,847,939	5,519,162	9,379,556	5,300,000	5,300,000	0
Other		183,880	0	0	0	0	0
Total	Continuing	\$40,508,899	\$5,637,918	\$10,002,256	\$5,300,000	\$5,300,000	\$0

Source of Funding							
General General Obligation Transfers from Sewer Total							
Fund	Bonds	Other Funds	Revenue	Funding			
\$0	\$0	\$0	\$5,300,000	\$5,300,000			

X00906	Sewer Line Enlargement	
Countywide		Countywide

This project funds the design and construction of the replacement of undersized sewer lines or lines that have reached capacity. Due to its long-term nature, this project is ongoing and funded as inadequate sewer lines are identified. FY 2002 funding of \$3,600,000 is required to complete the replacement of the Pohick Sewer Trunk line that is 60 inches in diameter and approximately 5,150 linear feet. This line is nearing capacity and needs to be replaced.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering		335,037	19,573	5,000	0	0	0
Construction		1,465,725	0	3,170,874	3,600,000	3,600,000	0
Other		27,026	0	4,000	0	0	0
Total	Continuing	\$1,827,788	\$19,573	\$3,179,874	\$3,600,000	\$3,600,000	\$0

Source of Funding							
General	General Obligation	Transfers from	Sewer	Total			
Fund	Bonds	Other Funds Revenue		Funding			
\$0	\$0	\$0	\$3,600,000	\$3,600,000			

X00910	Replacement & Renewal - Treatment	t
Countywide		Countywide

This project funds the replacement, rehabilitation, and renewal of County-owned and operated treatment facilities that are beyond the routine maintenance of the treatment facilities. FY 2002 funding includes \$5,500,000 for the replacement of the filter presses at the Noman M. Cole Jr., Pollution Control Plant due to the excessive repairs/replacement of this aging equipment. In addition, \$2,000,000 is required to replace 8 monomedia filter bottoms, which have been in service for twenty-three years and have corroded beyond economic repair.

	Total			FY 2001	FY 2002	FY 2002	
	Project	Prior	FY 2000	Revised	Advertised	Adopted	Future
	Estimate	Expenditures	Expenditures	Budget Plan	Budget Plan	Budget Plan	Years
Land							
Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and							
Engineering		335,241	0	544,000	0	0	0
Construction		3,753,445	0	2,802,323	7,500,000	7,500,000	0
Other		79,045	89,600	102,000	0	0	0
Total	Continuing	\$4,167,731	\$89,600	\$3,448,323	\$7,500,000	\$7,500,000	\$0

Source of Funding				
General	General Obligation	Transfers from	Sewer	Total
Fund	Bonds	Other Funds	Revenue	Funding
\$0	\$0	\$0	\$7,500,000	\$7,500,000